

Appl. No. 09/700,712
Amendment dated: January 16, 2007
Reply to OA of: September 13, 2006

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-16(cancelled).

17(currently amended). A Δ *thyA* strain of *Vibrio cholerae* deprived of its *thyA* gene functionality ~~by selected nucleotide sequence deletion and/or insertion in the chromosome~~ comprising at least one episomal autonomously replicating DNA element having a functional *thyA* gene that enables the strain to grow in the absence of thymine in the growth medium, wherein the ~~[[al]]~~ at least one episomal autonomously replicating DNA ~~elements~~ element further comprises a structural gene encoding a homologous or heterologous protein.

18(currently amended). A Δ *thyA* strain of *Vibrio cholerae* wherein the strain has been deprived of its *thyA* gene functionality by site-directed mutagenesis in the *V. cholerae* *cholerae* chromosome by deletion and/or insertion of nucleotides at the locus of the *thyA* gene.

19(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the at least one episomal autonomously replicating DNA element is a plasmid.

20(currently amended). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the at least ~~[[on]]~~ one episomal autonomously replicating DNA element has a foreign *thyA* gene.

21(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 20, wherein the foreign *thyA* gene is an *E. coli thyA* gene.

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22(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the encoded heterologous protein is selected from heat labile enterotoxin B-subunit of *Escherichia coli* (LTB) and *Schistosoma japonicum* glutathione S-transferase 26 kD protein (GST 26 kD).

23(currently amended). The Δ *thyA* strain according to claim 17, wherein the *thyA* gene ~~[[of]]~~ in the chromosome has the nucleotide sequence of SEQ ID NO: 1, before it has been deprived of its functionality as a *thyA* gene.

24(currently amended). The ~~Δ *thyA*~~ Δ *thyA* strain of *Vibrio cholerae* according to claim 18, wherein the ~~structural~~ *thyA* gene ~~[[of]]~~ in the chromosome has the nucleotide sequence of nucleotides 738 -1688 in the SEQ ID NO:1 before it has been deprived of its functionality as a *thy*~~[[]]~~A gene and wherein ~~approximately 200~~ 209 base~~[[]]~~pairs ~~[[of]]~~ from said ~~structural~~ *thy*~~[[]]~~A gene ~~[[is]]~~ have been deleted followed by ~~an insert of a non-coding region of DNA and 261 basepairs from Kan^R geneblock~~ have been removed.

25(currently amended). The Δ *thyA* strain of *Vibrio cholerae* according to claim 18, wherein the strain has its ~~structural~~ *thyA* gene removed from the *thyA* gene ~~[[of]]~~ locus in the chromosome.

26(currently amended). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the strain has its ~~structural~~ *thyA* gene removed from the *thyA* gene ~~[[of]]~~ locus in the chromosome and wherein the at least one episomal autonomously replicating DNA element has a foreign *thyA* gene.

27(currently amended). The Δ *thyA* strain of *Vibrio cholerae* according to claim 26 wherein the foreign *thyA* gene is an *E. coli* *thyA* gene.

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28(previously presented). The $\Delta thyA$ strain of *Vibrio cholerae* according to claim 27, wherein the encoded heterologous protein is heat labile enterotoxin B-subunit of *Escherichia coli* (LTB).

29(previously presented). The $\Delta thyA$ strain of *Vibrio cholerae* according to claim 27, wherein the encoded heterologous protein is *Schistosoma japonicum* glutathione S-transferase 26 kD protein (GST 26 kD).